

Triton Stormwater Solutions Flies High with Duluth Airport Project



Triton Stormwater Solutions underground stormwater system saved land and helped to eliminate the hazards associated with above-ground retention ponds at Minnesota's Duluth International Airport.

The Situation

The desire to upgrade facilities and expand the travel options of people in the greater Duluth region led airport planners and the state of Minnesota to build a new terminal at Duluth International Airport. The new construction and associated impervious surface will cover roughly 13 acres, creating the need for a robust and easily maintained stormwater management system.

The Challenge

The Duluth area has several challenging aspects for developers – rocky landscapes and subsoil, extreme weather and an awe-inspiring natural environment that needs to be protected.

Additionally, because of the problems associated with wildlife being attracted to the standing waters of retention ponds -- and the risks this poses near airports – developers were required to seek an underground stormwater management solution.

The Solution

Triton Stormwater Solutions was able to meet the needs of the project on every metric. Our underground chambers have more storage capacity than any similar product and the flexibility our system gives designers makes it perfect for projects with challenging terrain, existing infrastructure or other limitations.





The Triton Stormwater Solutions
Main Header Row distributes water to
the distribution chambers through
easy-to-fabricate port connections.
Cutout guides are molded into the
chambers making connections of the
system simple and easy.

Additionally, the Triton Stormwater Solutions system is perfect for the addition of pre-treatment devices to mitigate contamination and protect the environment and municipal water supplies. In the Duluth International Airport installation, a pretreatment system was employed to capture hydrocarbons.

Ultimately, the development team utilized a design that placed the Triton Stormwater Solutions innovative Main Header Row at the mid-point of the drainfield. After settling out sediments onto a special floor that is easily cleaned, the Main Header Row distributes water to long storage rows where it is held and leeched through a special glycol treatment zone before release to the existing retention area.

The Installation

Despite the large scope of the project – which included installation of chambers, connecting pipes, inspection ports and underdrain pipe – a three-man crew was able to complete the work in just 8.5 hours! And, the entire stormwater portion of the project – including excavation, installation and backfill – was done in less than a week.

The Result

The development team was able to create 32,000 cubic feet of storage in a 200' x 85' trench. The ease of installation of the Triton Stormwater Solutions' chambers allowed the stormwater portion of the project to be managed by a three-man team, ahead of schedule and under budget.

Developers finished the stormwater management phase in October of this year and the new terminal is scheduled to begin serving customers next fall.



"The Triton Stormwater Solutions system fit the niche. It's a nice tool to have, especially for airports where surface storage is restricted."

- Ryan Erdmann of PE Aviation, On-Site Supervisor

Triton Stormwater Solutions is the proven, comprehensive solution to stormwater management challenges. On your next project, turn to Triton Stormwater Solutions, the stronger, lighter, larger, greener, easier-to-install, cost-effective stormwater solution. Triton Stormwater Solutions gives you Power Over Water.

